

artery. Occasionally he suffered from frightful dreams, and imaginary pain in the lost arm. Whilst recovering, he had two attacks of quotidian intermittent fever, which readily yielded to quinine. On the 24th day after the operation he was walking about, and in less than six weeks he started for the Eastern States, restored to perfect health.

FORT BUCHANAN, ARIZONA, April 10th, 1859.

ART. IV.—*Vesico-Vaginal Fistula*. By C. S. FENNER, M. D.,
of Memphis, Tenn.

THE operation for the cure of vesico-vaginal fistula has now become fully established. For this grand surgical triumph we are indebted to the skill and persevering energy of Dr. J. M. Sims. It was accomplished only after years of intense application, much reflection, and many ineffectual attempts, each of which stimulated him to renewed exertions, and suggested to his mind changes and improvements, until success crowned his efforts, and placed him before the world as one of the benefactors of the nineteenth century.

Since the publication of Dr. Sims's first successful cases, the only material changes or improvements in the operation have been in the manner of fastening the sutures. Dr. S. has abandoned his "clamp suture," and adopted simply the "twisted interrupted suture." Dr. Bozeman uses a plate of lead perforated with holes, through which he draws the ends of the wire and fastens them; denominating it the "button suture." I have, on two occasions, used what may be called the single shot suture, passing both ends of the wire through a perforation in a No. 6 shot, and forcing it down on the wire until the denuded parts were brought in contact; then fastening it, cutting off the wire, and turning the ends down in opposite directions over the shot. This method of holding the suture in place is similar to that used by Dr. Bozeman in fastening the wire after it is passed through the perforation in his button.

Within the last few months, I have operated on four cases of vesico-vaginal fistula, a report of which I give below:—

CASE I.—Maria, a servant girl, aged 18 years, came under my charge, Oct. 3d, 1858, with vesico-vaginal fistula of ten months' standing; was delivered of her first child after a difficult labour requiring the aid of forceps; child stillborn.

Examination.—Found an oval fistula, of sufficient size to admit the end of the little finger, situated in the left side of the vesical trigone.

Operation.—Assisted by my friend, Dr. W. B. Wright, I freshened the edges, introduced five silver sutures, and brought the parts together by simply twisting the ends of the wire, as recommended by Dr. Sims. The

day after the operation, her menstrual discharge came on, and lasted five days. At the end of eight days, I removed the sutures, and found union perfect. She wore the catheter a few days, and then returned to her labour in the field, and remained entirely well for five months; when a slight dribbling of urine came on, and she was sent to me again. On examination, I discovered a minute opening in the cicatrix which would admit the end of a small probe. I closed this by another operation, but, in this instance, union did not take place. In a few days I repeated the operation, in presence of Drs. Borland and Willet, introducing three stitches, and on removing them on the sixth day found union perfect.

CASE II.—Mrs. T., from Mississippi, aged 20 years, was sent me, Oct. 20th, 1858, by Dr. J. S. Davis. Had her first child eight months before, after a difficult labour requiring the use of forceps. The child was born alive, and of large size. After delivery she had no control over the contents of the bladder.

Examination.—Found an opening half an inch in its longest diameter, in the vesical trigone, on the left side; pelvis unusually small; labia much excoriated from constant contact with urine.

Operation.—Assisted by Drs. Tucker and Woodward, the edges were pared, four sutures introduced, and the wires simply twisted. On the eighth day, removed the stitches, and found union entire, except at a point not larger than the head of a pin, which I hoped would close by the application of the nitrate of silver. She preferred to return home and wait awhile before submitting to another operation. Dr. Davis applied the caustic, but without benefit. He wrote me, under date of Nov. 11th, as follows: "I saw Mrs. T. this evening, at her house, and found her more cheerful than usual. She says, by lying on her right side, she passes the whole night without the escape of a drop of urine, and in the morning discharges it *pleno rivo*; but after being up for a few hours, it begins to run away by the fistulous opening." She came to me for another operation, June 8th, 1859. I found, on close examination, a minute opening just below the line of the cicatrix, not larger than a bristle. After paring the parts, I introduced three twisted interrupted sutures, and on removing them on the seventh day, found union perfect.

CASE III.—Hannah, a stout, healthy negro woman, came under my care, April 7th, 1859. She was about twenty years of age; was delivered of her first child two years ago, after a difficult labour. The child was stillborn. The urine has not been retained since.

Examination.—Found a large circular opening in the bas-fond of the bladder. A considerable portion of the anterior lip of the cervix uteri had sloughed away, leaving a thin sharp edge just at the os. The vaginal canal was shortened nearly one-half. From the root of the urethra to the anterior edge of the fistula, it was one inch; the anterior edge entirely unyielding, and the sides could not be brought together laterally.

Operation.—I pared the edges, including the surface left at the os uteri, introduced five sutures, and, on twisting them, found the parts both on the right and left side came together; but the stitches passing through the uterus failed to approximate the parts, and finally tore out. On the eighth day, I removed the remaining stitches, and found union had taken place on each side of the os uteri. A few days afterwards, I freshened the edges again. The uterine surface that could be pared was not more than two lines in breadth, extending half an inch transversely. I introduced four sutures,

drew down the womb; to do which the speculum had to be withdrawn, leaving the point just beneath the sphincter-ani muscle. The sutures were twisted and left ten days; and, on removing them, I found some union had taken place at the sides, leaving a triangular opening, the base being formed by the uterine edge of the fistula. The rigidity of the parts preventing the sides of the fistula from approximating, and the uterine portion acting as a wedge to keep the edges apart, I determined on a different operation. I passed a knife within the os, and cut out an inverted Λ portion, including all the thin part left from the sloughing, extending the incision down each side of the fistula. One stitch was passed through the cervix uteri, and two others laterally through the sides of the fistula, and each fastened with a single shot, as described above. Union took place from the os uteri down nearly three-fourths of an inch, greatly reducing the sides of the opening, which I think can be closed by another operation; but the patient being considerably reduced in strength, I thought it best to wait until cool weather before making further effort to cure her.

CASE IV.—Mrs. F. came to me on the 19th of April last. She was 41 years of age, the mother of seven children, two of whom are living. Was confined with her seventh child sixteen months before. Says she was in labour four days, and that her water was not drawn off during the time; child stillborn. Since delivery has not been able to retain her urine.

Examination.—I found union between the root of the urethra and the posterior wall of the vagina, preventing the introduction of the speculum. I divided this, and found three lines of the urethra gone, and an opening in the neck of the bladder capable of admitting only a very small catheter.

Operation.—I pared the edges freely, and brought the bladder down so as to cover the lost portion of the urethra, introduced five sutures, a part of which were fastened by the single shot, and the others in the usual way. The patient was unusually restless, and on the fifth night got the catheter out, and notwithstanding my strict injunction to apprise me immediately should that accident occur, her husband permitted it to remain out until morning; the consequence was that, before the catheter was reintroduced, a slight escape of urine had taken place, caused by an accumulation of water and the consequent giving way of a small portion of the newly formed cicatrix. The stitches were removed the seventh day, and union found entire, except at one point, where there was an opening which permitted the urine to pass drop by drop. This I closed by another slight operation, and on removing the stitches on the sixth day found union perfect.

ART. V.—*Cases of Disordered Menstruation producing Phenomena simulating the Symptoms of Grave Diseases.* By I. MOSES, M. D., of New York.

A MOST interesting case of vicarious menstruation having come under my treatment during the last few months, I was induced to look back through my records, and, in so doing, found several cases of interest, which I propose to add to the number already recorded in the medical